

AZ Mount Pro Firmware Upgrade History

V20151016 Initial release (Main Board)

V20151018 Initial release (Hand Controller)

V20160505 Firmware upgrade for HC

V20160523 Firmware upgrade for main board

New features:

1. A new option of Altitude Limit is available (applies to both slewing and tracking), which replaces the "Tracking below the horizon".
2. The last alignment star could be discarded during the One/Two/Three Star Alignment.

Improvements:

- Initial calibration accuracy has been improved.
- Coordinates of Constellations have been updated.
- The Binary Star has been renamed to Double/Multi-Star, and has been rebuilt. The new list includes all pairs of stars which both stars are brighter than magnitude 7.0. The data is extracted from UCAC4, Hipparcos and Washington Double Star catalog.
- The alignment star list has been rebuilt, and now sorted by magnitude.
- The algorithm for calculating stars/stellar objects has been improved.
- Solar System Align have the same interface as One/Two/Three Star Alignment.

Bug Fixed:

- The Sync to Target function may not work as expected.
- Some stars in Named Star have incorrect coordinate and/or name.
- One/Two/Three Star Alignment sometimes may not work as expected.

V20160525 Firmware upgrade for HC and Mainboard

Bug fixed

- One/Two/Three Star Alignment bug.
- First goto may off if the self-calibration is skipped.

V20160919 Firmware upgrade for HC

Bug fixed

- Wi-Fi factory reset or restore option won't return.
- Binary/Multi Star list error.

V20170109 Firmware upgrade for HC

V20161101 Firmware upgrade for main board

Improvements:

- Expanded User Defined Tracking Speed from [0.9x, 1.1x] to [0.5x, 1.5x].
- Add prompt of Wi-Fi Restart and Restore to Factory.

Bug Fixed:

- The Sync to Target failed to work sometimes.
- Two and Three Star Alignment bug.

V20170322 Firmware upgrade for HC

V20170228 Firmware upgrade for main board

Bug Fixed:

- Mount may not stop slewing at certain conditions.

V20170410 Firmware upgrade for main board

Improvement:

- New sensor IC has been covered

Bug Fixed:

- Mount may have Zero Position discrepancy.

Others:

- This version needed for ASCOM/Commander V5.6.0.0 and later version

V20190221 Firmware upgrade for HC

V20190221 Firmware upgrade for main board

Bug Fixed:

- Mount may slew 360° when the mount tracking pass meridian;
- One Star Alignment may result different correction in EAST/WEST sky
- Other minor bugs

V20190618 Firmware upgrade for main board

Bug Fixed:

- Addressed GPS rollover bug

V20200113 Firmware upgrade for hand controller

Bug fixed:

- Fixed bug that customizing comet causes hand controller frozen

V20210106 Firmware upgrade for hand controller

New Feature:

- Daylight mode added. Under this mode, only Sun will be shown in alignment routine. WARNING will be displayed and needs be confirmed when trying to use Sun as an alignment target.

Improvement:

- Updated Polaris and Sigma Oct coordinates with Gaia EDR3 catalog
- Added firmware version check

Other Change:

- Removed CEM40/GEM45

V20210412 Firmware upgrade for hand controller

Bug fixed:

- GOTO does not reflect Star Alignment result

V20211116 Firmware upgrade for hand controller

V20210420 Firmware upgrade for main board

New:

- Add new control algorithm for satellite tracking application (see [Application Note for special attention](#))
- A separate RS232 command set is available for customized motor control